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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,273	07/30/2001	Akihiko Takano	HITA.0088	7775

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EXAMINER

HWANG, JOON H

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/916,273

Applicant(s)

TAKANO ET AL.

Examiner

Joon H. Hwang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6,9-13 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) 1-5,7,8,14,15 and 20 is/are ~~withdrawn from consideration~~ *Cancelled*.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6,9-13 and 16-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The applicants amended claims 6, 9, 10, 13, and 16 and canceled claims 1-5, 7, 8, 14, 15, and 20 in the amendment received on 1/7/04.

The pending claims are 6, 9-13, and 16-19.

Response to Arguments

2. Applicant's arguments with respect to claims 6, 13, and 16 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niwa et al. (U.S. Patent No. 5,987,460) in view of Spencer (U.S. Patent No. 5,826,261), and further in view of Nielsen et al. (EP 0851368 A2).

With respect to claim 6, Niwa discloses a document information display part for displaying document information received as search results (lines 30-36 in col. 4, lines 18-56 in col. 5, lines 18-60 in col. 6, fig. 3, and fig. 4). Niwa discloses a topic word display part for displaying topic words included in documents referenced in the document information display part (lines 30-38 in col. 2, lines 3-8 in col. 4, lines 29-67 in

col. 7, and fig. 8). Niwa further discloses an analysis for extracting and displaying topic words for a subject document can be run (lines 21-35 in col. 9). Niwa discloses word selecting means for selecting words displayed in the topic word display part (lines 22-37 in col. 16 and lines 31-42 in col. 17). Niwa discloses a first search start button for initiating a document retrieval by using the words selected by the word selecting means as a first query (lines 22-37 in col. 16 and lines 31-42 in col. 17). Niwa teaches any database can be used for searching and retrieving document (lines 12-19 in col. 4). Niwa searches a database based on a keyword (lines 30-44 in col. 4 and lines 18-37 in col. 5). This teaches a keyword-search-type database element. Niwa also searches a database based on a topic extracted from search results (lines 46-67 in col. 1, lines 34-60 in col. 6, lines 29-39 in col. 7, line 58 in col. 9 thru line 11 in col. 10, and lines 22-37 in col. 16). The searching based on a topic teaches associative-document-search-type database elements. Documents are classified in each topic (fig. 10 and fig. 20). Niwa does not explicitly disclose selecting databases for searching. However, Spencer discloses selecting databases for searching, wherein the databases can be multiple, heterogeneous, distributed, and document databases (lines 54-67 in col. 9, lines 26-29 in col. 18, fig. 1, fig. 6, and fig. 7). Spencer also discloses various search engines teaching various search techniques, such as a document vector based search, which teaches an associative-document-search-type database (lines 44-53 in col. 9 and lines 1-10 in col. 10). Therefore, based on Niwa in view of Spencer, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Spencer to the system of Niwa in order to limit databases to a

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subset of document databases, which are relevant to a query, for more relevant search results. Niwa further discloses a means for modifying and confirming a Boolean expression that associates a plurality of words included in the first query (line 45 in col. 4 thru line 12 in col. 5 and line 38 in col. 16 thru line 17 in col. 17). Niwa and Spencer do not explicitly disclose modifying a Boolean expression based on a search type of a keyword-search-type database. However, Nielsen discloses a graphical user interface to assist a user to modify and confirm a Boolean search expression, wherein the graphical user interface depends on features supported by underlying search engine and a list of available Boolean operators are displayed (lines 10-47 on page 2, lines 30-35 on page 4, lines 1-2 on page 6, line 57 on page 6 thru line 3 on page 7, and fig. 3). Such graphical user interface is provided to a user in order to exploit the full power of the search system (lines 43-44 on page 2). Such graphical user interface is utilized to at least one search computer (lines 11-14 on page 3). Thus, Nielsen teaches such graphical user interface varies the list of available Boolean operators depending on features supported by a search engine. Therefore, based on Niwa in view of Spencer, and further in view of Nielsen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Nielsen to the system of Niwa in order to assist a user to exploit the full power of a search system.

With respect to claim 9, Spencer further discloses a means for sending information about the selected databases to be searched and query information to a search server (lines 30-61 in col. 18). Therefore, the limitations of claim 9 are rejected in the analysis of claim 6 above, and the claim is rejected on that basis.

With respect to claim 10, Niwa discloses a keyword input part for inputting keywords for a keyword search (lines 30-36 in col. 4 and lines 18-56 in col. 5), document selecting means for selecting documents referenced in the document information display part (lines 18-60 in col. 6), and a second search button for initiating a document retrieval using documents selected by the document selecting means as a second query (lines 18-60 in col. 6, lines 29-39 in col. 7, lines 22-37 in col. 16, and lines 31-42 in col. 17). Niwa further discloses an analysis for extracting and displaying topic words for a subject document can be run (lines 21-35 in col. 9), which teaches a document instead of documents can be utilized in searching.

With respect to claim 11, Niwa discloses document content display means for displaying the contents of a document referenced in the document information display part (lines 18-60 in col. 6), means for registering at least a portion of documents displayed by the document content display means (line 61 in col. 6 thru line 28 in col. 7, fig. 4, and fig. 10), and a third search button for initiating a document retrieval by using the registered portion as a third query (lines 22-37 in col. 16 and lines 31-42 in col. 17). Niwa further discloses an analysis for extracting and displaying topic words for a subject document can be run (lines 21-35 in col. 9), which teaches a document instead of documents can be utilized in searching.

With respect to claim 12, Niwa discloses the topic words are automatically generated on a search server by a summarizing means (lines 31-38 in col. 2, lines 29-39 in col. 7, lines 14-37 in col. 18, and fig. 21A).

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5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kamper (U.S. Patent No. 5,982,370) in view of Nielsen et al. (EP 0851368 A2).

With respect to claim 13, Kamper discloses receiving search results from a search server identifying at least one document (fig. 3, fig. 5d, and lines 47-61 in col. 5). Kamper discloses specifying at least a part of a document identified in the search results as a query for a database search (fig. 5d and line 66 in col. 6 thru line 23 in col. 7). Kamper discloses sending a search request to the search server requesting to search at least one keyword-search-type database using the query (line 66 in col. 6 thru line 23 in col. 7, lines 23-46 in col. 3, and fig. 3). Kamper does not explicitly disclose modifying and confirming a Boolean expression based on a search type of a keyword-search-type database. However, Nielsen discloses a graphical user interface to assist a user to modify and confirm a Boolean search expression, wherein the graphical user interface depends on features supported by underlying search engine and a list of available Boolean operators are displayed (lines 10-47 on page 2, lines 30-35 on page 4, lines 1-2 on page 6, line 57 on page 6 thru line 3 on page 7, and fig. 3). Such graphical user interface is provided to a user in order to exploit the full power of the search system (lines 43-44 on page 2). Such graphical user interface is utilized to at least one search computer (lines 11-14 on page 3). Thus, Nielsen teaches such graphical user interface varies the list of available Boolean operators depending on features supported by a search engine. Nielsen discloses sending the confirmed Boolean expression to the search server (lines 37-38 on page 6 and fig. 2). Therefore, based on Kamper in view of Nielsen, it would have been obvious to one having ordinary

skill in the art at the time the invention was made to utilize the teachings of Nielsen to the system of Kamper in order to assist a user to exploit the full power of a search system.

6. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niwa et al. (U.S. Patent No. 5,987,460) in view of Nielsen et al. (EP 0851368 A2).

With respect to claim 16, Niwa discloses creating a summary (title and text) from words extracted from at least a part of a document when the at least a part of the document is specified as a search term (lines 37-44 in col. 4, lines 40-51 in col. 6, lines 22-37 in col. 16, lines 31-42 in col. 17, and fig. 5) concerning a summarizing means. Niwa searches a database based on a topic extracted from search results (lines 46-67 in col. 1, lines 34-60 in col. 6, lines 29-39 in col. 7, line 58 in col. 9 thru line 11 in col. 10, lines 22-37 in col. 16, and lines 31-42 in col. 17) concerning query constructing means. The searching based on a topic teaches associative-document-search-type database elements. Documents are classified in each topic (fig. 10 and fig. 20). Niwa further discloses an analysis for extracting and displaying topic words for a subject document can be run (lines 21-35 in col. 9), which teaches a document instead of documents can be utilized in searching. Niwa does not explicitly disclose modifying and confirming a Boolean expression based on a search type of a keyword-search-type database. However, Nielsen discloses a graphical user interface to assist a user to modify and confirm a Boolean search expression, wherein the graphical user interface depends on features supported by underlying search engine and a list of available Boolean

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operators are displayed (lines 10-47 on page 2, lines 30-35 on page 4, lines 1-2 on page 6, line 57 on page 6 thru line 3 on page 7, and fig. 3). Such graphical user interface is provided to a user in order to exploit the full power of the search system (lines 43-44 on page 2). Such graphical user interface is utilized to at least one search computer (lines 11-14 on page 3). Thus, Nielsen teaches such graphical user interface varies the list of available Boolean operators depending on features supported by a search engine. Nielsen discloses sending the confirmed Boolean expression to the search server (lines 37-38 on page 6 and fig. 2). Therefore, based on Niwa in view of Nielsen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Nielsen to the system of Niwa in order to assist a user to exploit the full power of a search system.

With respect to claim 17, Niwa teaches topic word requesting means for requesting the associative-document-search-type database to create a summary representation of the contents of a document corresponding to a document ID when the document ID is returned from the associative-document-search-type database as a search results, wherein the query constructing means is adapted to send summaries obtained from the associative-document-search-type database by the topic word requesting means to at least one additional associative-document-search-type database as a query (lines 39-55 in col. 5, line 18 in col. 6 thru line 39 in col. 7, lines 9-20 in col. 9, fig. 4, fig. 5, fig. 10, lines 22-37 in col. 16 and lines 31-42 in col. 17).

With respect to claim 18, Niwa discloses merging a plurality of document summaries to create a set of topic words when the plurality of document summaries are

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returned from an associative-document-search-type database in response to a request from the topic word requesting means (lines 30-38 in col. 2, lines 3-8 in col. 4, lines 29-39 in col. 7, 58-62 in col. 9, lines 22-37 in col. 16, and lines 31-42 in col. 17) concerning search result merging means. Niwa also teaches any database can be used for searching and retrieving document (lines 12-19 in col. 4).

With respect to claim 19, Niwa discloses the search server adapted to send a document retrieval request to at least one keyword-search-type database in response to a single search request from the document retrieval terminal (lines 30-36 in col. 4, lines 18-56 in col. 5, lines 18-60 in col. 6, fig. 3, and fig. 4). Niwa teaches any database can be used for searching and retrieving document (lines 12-19 in col. 4). Niwa searches a database based on a keyword (lines 30-44 in col. 4 and lines 18-37 in col. 5). This teaches a keyword-search-type database element. Niwa also searches a database based on a topic extracted from search results (lines 46-67 in col. 1, lines 34-60 in col. 6, lines 29-39 in col. 7, line 58 in col. 9 thru line 11 in col. 10, and lines 22-37 in col. 16). The searching based on a topic teaches associative-document-search-type database elements. Documents are classified in each topic (fig. 10 and fig. 20).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joon H. Hwang whose telephone number is 703-305-6469. The examiner can normally be reached on 9:30-6:00(M~F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Joon Hwang
3-18-04



JEAN M. CORRIELLUS
PRIMARY EXAMINER